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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,734	12/19/2008	Karim Bencherif	294554US41X PCT	9529
22850	7590	10/07/2011	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			PARSONS, THOMAS H	
			ART UNIT	PAPER NUMBER
			1729	
			NOTIFICATION DATE	DELIVERY MODE
			10/07/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/589,734	<b>Applicant(s)</b> BENCHERIF ET AL.	
	<b>Examiner</b> THOMAS PARSONS	<b>Art Unit</b> 1729	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 18-34 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☒ Claim(s) 18-34 are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 18-21 and 23-27, drawn to a fuel cell system management method.

Group II, claim(s) 22, drawn to a fuel cell system management method.

Group III, claim(s) 28-29, drawn to a fuel cell system management system.

Group IV, claim(s) 30-34, drawn to a fuel cell system management system.

2. The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

All of the groupings are directed to a fuel cell system management method or a fuel cell system management system, but each group has a different special technical feature not shared by the remaining groups.

**Group I** is directed to a fuel cell system management method which has the special technical feature of calculating a voltage difference between a mean cell voltage for the cell assembly and a predetermined mean cell voltage; comparing the voltage difference with a predetermined threshold voltage difference; and determining a presence of carbon monoxide poisoning in the cell assembly if the voltage difference is equal to or greater than the predetermined threshold voltage difference, and determining an absence of carbon monoxide poisoning in the cell assembly if the voltage difference is lower than the predetermined threshold voltage difference *not shared by any of the remaining groups*.

**Group II** is directed to a fuel cell system management method which has the special technical feature of calculating a standard deviation of the voltages measured across the

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terminals of the cells of the cell assembly; comparing the standard deviation with a predetermined threshold standard deviation; and determining presence or absence of water flooding in the cell assembly based on the comparison, the presence of water flooding in the cell assembly being reflected by the standard deviation being equal to or higher than the predetermined threshold standard deviation, and the absence of water flooding in the cell assembly being reflected by the standard deviation being lower than the predetermined threshold standard deviation ***not shared by any of the remaining groups.***

**Group III** is directed to a fuel cell system management system which has the special technical feature of a device for removing carbon monoxide poisoning in the fuel cell system; control means for controlling the device for removing carbon monoxide poisoning; and processing means in the electronic control unit, for receiving measurements from the sensors of the voltage across the terminals of each of the respective cells and supplying measurement signals to the control means, the processing means comprising computation means and comparison means ***not shared by any of the remaining groups.***

Group IV is directed to a fuel cell system management system which has the special technical feature of processing means in the electronic control unit, comprising computation means for calculating a standard deviation of the voltages measured across the terminals of the cells of the fuel cell assembly, and comparison means for comparing the standard deviation with a predetermined threshold standard deviation, the processing means determining therefrom presence or absence of water flooding in the cell assembly, the presence of water flooding in the cell assembly being reflected by the standard deviation being equal to or higher than the predetermined threshold standard deviation, and the absence of water flooding in the cell assembly being reflected by the standard deviation being lower than the predetermined threshold standard deviation ***not shared by any of the remaining groups.***

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of

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election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof. Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. Where such evidence or admission is provided by applicant, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Examiner Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS PARSONS whose telephone number is (571)272-1290. The examiner can normally be reached on M-F (7:00-3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ula Ruddock can be reached on (571) 272-1481. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ULA C. RUDDOCK/  
Supervisory Patent Examiner, Art Unit 1729

/Thomas H Parsons/  
Examiner, Art Unit 1729